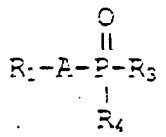
alkyl, a metal of main groups I, II or III of the periodic system, ammonium, substituted ammonium, or ammonium compounds derived from ethylenediamine or amino acids.--

IN THE CLAIMS:

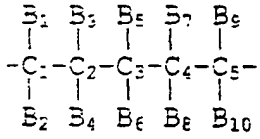
Please cancel claims 1-12 and replace them with claims 13-24 as follows:

--13. Organophosphorus compounds of the general formula (I)



(I)

wherein A is selected from the group which consists of a (C_{1-9}) alkylene residue, which may comprise one or more double bonds and may be substituted with hydroxy, halogen, amino, oxo groups with branched or unbranched C_{1-9} alkyl groups and C_{2-9} alkenyl groups, wherein the C_{1-9} alkyl groups and C_{2-9} alkenyl groups may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, -C-O-C- and -C-N-C-, wherein the carbon atoms of -C-O-C- and -C-N-C- may be substituted with an alkyl having up to 7 carbon atoms or hydroxy groups,
or in which A is of the following formula (II):



(II)

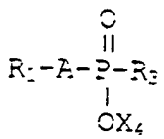
wherein one or more of the carbon atoms selected from the group C_3, C_4, C_5, together with their substituents, may also be absent, and at least one substituent present in the range from B_1 to B_{10} is a C_{3-8}-cycloalkyl-(C_{0-9})-alkyl group, wherein both the C_{3-8} cycloalkyl group and the C_{0-9} alkyl group may comprise one or more double bonds and one or two carbon atoms of the cycloalkyl group may be replaced by nitrogen, oxygen or sulfur atoms, and wherein both the cycloalkyl group and the alkyl group may be substituted with hydroxy, halogen, amino, oxo groups with branched or unbranched C_{1-9} alkyl groups and C_{2-9} alkenyl groups, wherein the C_{1-9} alkyl groups and C_{2-9} alkenyl groups may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, and the remaining substituents B_1 to B_{10} present are selected from the group which consists of hydrogen, hydroxy, halogen, amino groups, C_{1-26} alkyl residues, C_{1-26} alkoxy residues, C_{1-26}-alkoxy-C_{1-26}-alkyl residues or both substituents of a C atom together form an oxo group, wherein each C_{1-26} alkyl residue and each C_{1-26} alkoxy residue may be branched or unbranched and be saturated or unsaturated with one or more double bonds and may be substituted with hydroxy, amino, halogen and oxo groups,
in which R_1 is selected from the group which consists of 5- and 6-membered heterocycles with at least one ring nitrogen atom or a polycyclic carbon with at least one of these heterocycles, wherein at least one of these nitrogen atoms belongs to a hydroxamic acid group or a hydroxamic acid ester group, and may be saturated or unsaturated with one or more double or triple bonds and may thus also be aromatic and may be substituted with hydroxy, halogen, amino, oxo groups and with branched or unbranched C_{1-9} alkyl groups and C_{2-9} alkenyl groups, wherein the C_{1-9} alkyl groups and C_{2-9} alkenyl groups may be saturated or unsaturated with one or more double or triple bonds and may be substituted with hydrogen, hydroxy, amino, halogen and oxo groups, wherein the nitrogen atom of the hydroxamic acid group or hydroxamic acid ester group is substituted with OR_5 and

R_5 is selected from the group which consists of hydrogen, substituted and unsubstituted C_{1-9} alkyl, substituted and unsubstituted hydroxy-C_{1-9}-alkyl, substituted and unsubstituted C_{1-9} alkenyl, substituted and unsubstituted C_{1-9} alkynyl, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted heterocyclic residue,

in which R_3 and R_4 are identical or different and are selected from the group which consists of hydrogen, substituted and unsubstituted C_{1-26} alkyl, hydroxy-C_{1-26}-alkyl, substituted and unsubstituted aryl, substituted and unsubstituted acyl, substituted and unsubstituted aralkyl, substituted and unsubstituted C_{1-26} alkenyl, substituted and unsubstituted C_{1-26} alkynyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic residue, halogen, OX_3 and OX_4,

wherein X_3 and X_4 are identical or different and are selected from the group which consists of hydrogen, substituted and unsubstituted C_{1-26} alkyl, substituted and unsubstituted hydroxy-C_{1-26}-alkyl, substituted and unsubstituted aryl, substituted and unsubstituted aralkyl, substituted and unsubstituted C_{1-26} alkenyl, substituted and unsubstituted C_{1-26} alkynyl, substituted and unsubstituted cycloalkyl, substituted and unsubstituted heterocyclic residue, a silyl, a cation of an organic and inorganic base, in particular a metal of main groups I, II or III of the periodic system, ammonium, substituted ammonium and ammonium compounds derived from ethylenediamine or amino acids,
and the pharmaceutically acceptable salts, esters and amides thereof and salts of the esters.

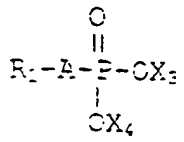
14. Compound according to claim 13, characterised in that the organophosphorus compounds are of the formula (III)



(III)

wherein R_3 is preferably hydrogen, methyl, ethyl, an amide residue and X_4 is selected from the group which consists of hydrogen, sodium, potassium, methyl, ethyl.

15. Compound according to claim 13, characterised in that the organophosphorus compounds are of the formula (IV)



(IV)

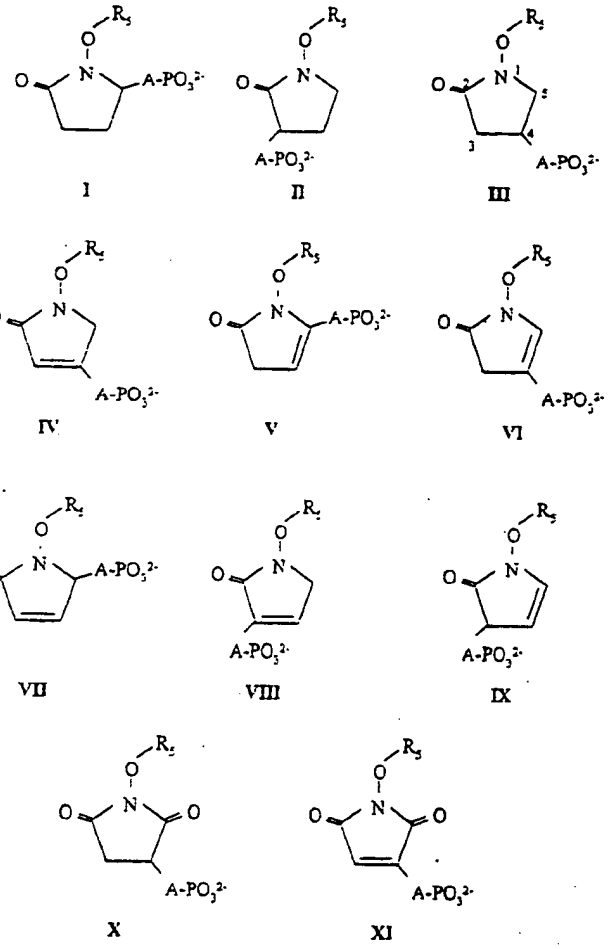
wherein X_3 and X_4 are identical or different and are selected from the group which consists of hydrogen, a (C_{1-3}) alkyl, a metal of main groups I, II or III of the periodic system, ammonium, substituted ammonium, or ammonium compounds derived from ethylenediamine or amino acids.

16. Compound according to claim 13, characterised in that X_3 and X_4 are identical or different and are selected from the group which consists of hydrogen, sodium, potassium, methyl, ethyl.

17. Compound according to claim 13, characterised in that A is selected from the group which consists of alkylene, alkenylene, hydroxyalkylene and oxoalkylene.

18. Compound according to claim 17, characterised in that A is selected such that three atoms are present between the nitrogen atom of the heterocyclic group and the phosphorus atom, wherein A is preferably a methylene, hydroxymethylene, ethylene, ethenylene or hydroxyethylene.

19. Compound according to claim 13, characterised in that the compound is selected from the group of compounds which consists of

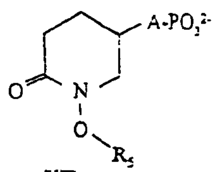


I II III

IV V VI

VII VIII IX

X XI



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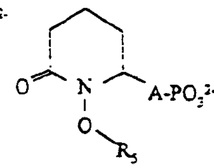

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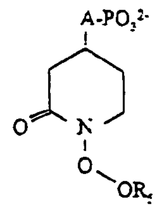

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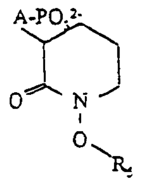

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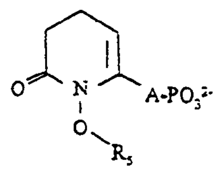

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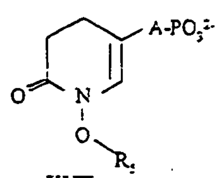

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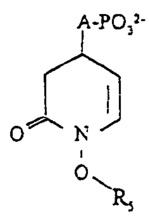

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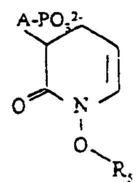

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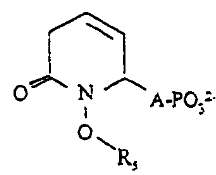

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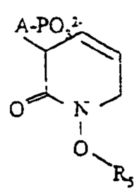

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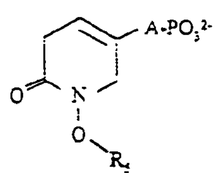

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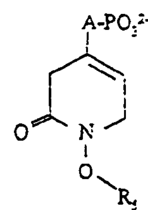

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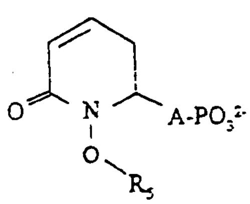

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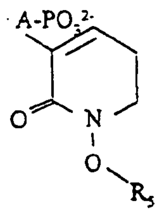

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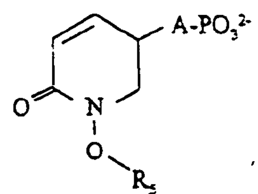

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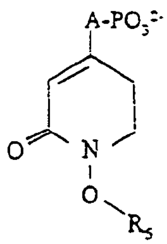

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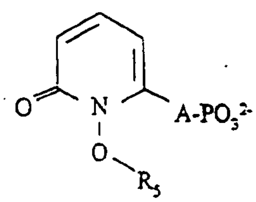

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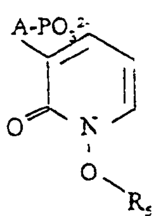

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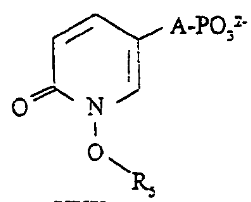

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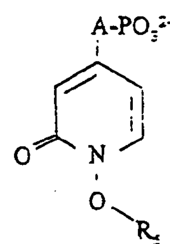

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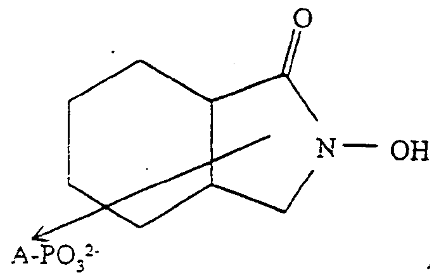

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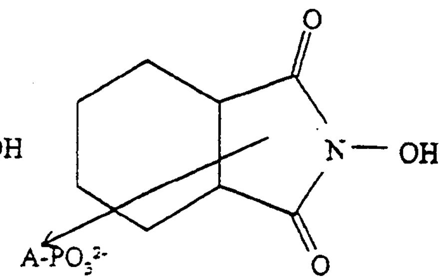

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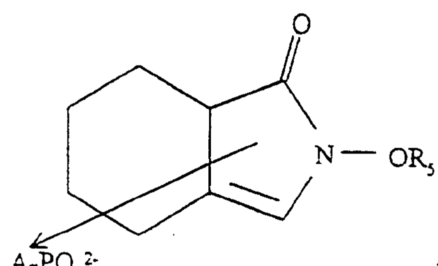

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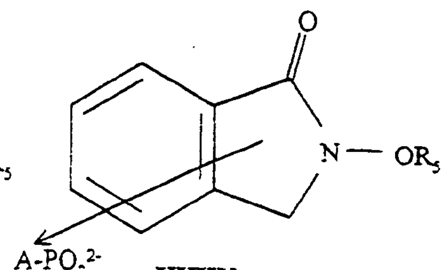

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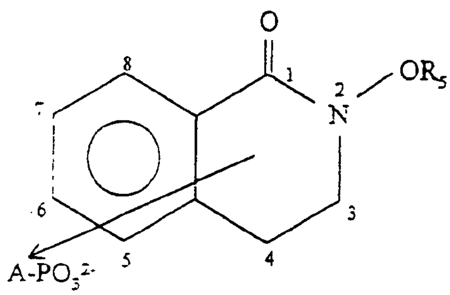

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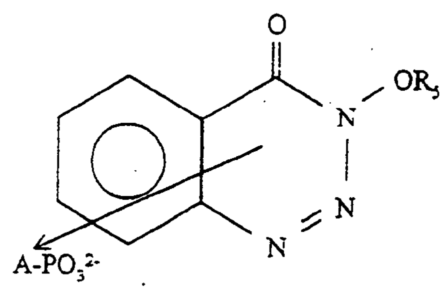

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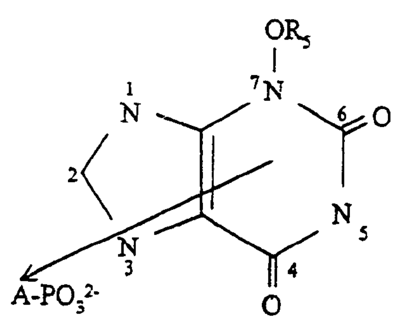

XXXVIII

and the corresponding phosphinic acid and phosphinoyl derivatives, wherein R_5 is defined as in claim 13.

20. Use of a compound according to claim 13 as a fungicide, bactericide or herbicide in plants.

21. Use according to claim 13 for the treatment of infections caused by bacteria, viruses, fungi or uni- or multicellular parasites.

22. Use according to claim 21 for the prevention and treatment of infections caused by unicellular parasites, namely the causative organisms of malaria, sleeping sickness, Chagas' disease, toxoplasmosis, amoebic dysentery, leishmaniases, trichomoniasis, pneumocystosis, balantidiasis, cryptosporidiosis, sarcocytosis, acanthamoebosis, naeglerosis, coccidiosis, giardiasis and lambliasis.

23. Pharmaceutical preparation for the therapeutic and prophylactic treatment of infectious processes, characterised in that the preparation contains an active content of at least one organophosphorus compound according to claim 13 together with a pharmaceutically acceptable excipient.

24. Pharmaceutical preparation according to claim 23, characterised in that the preparation contains another pharmaceutical active substance. --